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Global Aflatoxin Proficiency Testing Program to Improve Food Safety

Aflatoxin proficiency testing is a key component in managing aflatoxin risk in the global feed sector. Participation in proficiency testing programs helps a laboratory assure the quality of test results.

In 2015, to help build the capability of animal feed and food safety laboratories, a global aflatoxin proficiency testing program was launched by the Office of the Texas State Chemist as part of the ongoing collaboration between Texas A&M AgriLife Research and FAO. Ninety laboratories received aflatoxin proficiency samples and a total of 84 laboratories submitted data through the program's electronic portal on the Aflatoxin Proficiency Testing and Control in Africa, Asia, Americas and Europe (APTECA) website. The data were summarized using a format described in the International Standards Organization (ISO) criteria for proficiency testing programs. The report included an assigned value and variability for the proficiency testing material, the actual composite results and variability of the participating laboratories and individual lab scores. The program preserves the anonymity of the participants, who ranged from government to private labs on 5 continents. Results showed 96% of the laboratories produced acceptable results, two lab results were eliminated as outliers and one was eliminated as a result of high intra-lab variability. The participant mean results were slightly higher (4 parts per billion) than the assigned value and the average variability of the test results were double that of the proficiency provider's homogeneity test results. These are both indicators that the proficiency program successfully met performance criteria and the results provide a representative picture of the global capability to measure aflatoxin.

Two rounds of the proficiency testing program are targeted for 2016; the second round was mailed to 147 participants in July and the results will be reported (online) the first week of October. This report will include a graphical presentation of the results to facilitate interpretation. Already ISO 17025 accredited, the proficiency testing provider (Office of the Texas State Chemist) will pursue accreditation under several more ISO standards including the General Requirements for Proficiency Testing and General Requirements for the Competence of Reference Material Providers, in 2016.

Proficiency testing helps evaluate the performance of laboratories, identifies problems in a lab, establishes the effectiveness and comparability of methods,



and provides additional confidence to laboratory customers.

The Texas State Chemist first launched a quality systems approach to managing aflatoxin risk in Texas through the One-Sample-Strategy in 2011. The same approach is extended globally through the APTECA program. The proficiency testing program provides an entry point in working with firms to develop and implement food safety plans to manage aflatoxin risk. In 2014, OTSC extended a quality systems approach to manage aflatoxin risk to Eastern Africa, which experiences aflatoxin levels comparable to Texas. To date, 80% of the Kenya formal maize milling industry has adopted the quality systems approach used in Texas and has improved food safety for approximately 10 million Africans.

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Phone: 979-845-1121 Fax: 979-845-1389 Web: http://otscweb.tamu.edu Protects consumers & enhances Agri-Business through its Feed & Fertilizer Regulatory Compliance Program, surveillance & monitoring of Animal-Human health & environmental hazards, & preparedness planning.

OTSC Bids Farewell to Roger D. Hoestenbach, Jr.

After 31 years of service with the Office of the Texas State Chemist Roger Hoestenbach retired as Associate Director of OTSC effective July 1, 2016.

In addition to his administrative responsibilities, Roger was responsible for the operation of the facility, preparedness and emergency response component of OTSC strategic plan, and oversight of the licensing and labeling program. Roger obtained his BS degree from Cameron University, Lawton, OK in the fields of Biology and Chemistry. His graduate studies at Texas A&M University included the areas of Nutritional Biochemistry and Animal Science.

Roger has served on the Board of Directors, through the Presidency of the Association of Southern Feed, Fertilizer, and Pesticide Control Officials (ASFFPCO), the Association of American Feed Control Officials (AAFCO) and the Association of Plant Food Control Officials (AAPFCO). In 1999, he was honored with the

AAFCO Distinguished Service Award and also received the Hammer Award from the National Partnership for Reinventing Government by then Vice-President Al Gore, for work as part of a team that established new procedures to prevent establishment of "mad cow disease" in the United States.

In honor of his retirement, the office hosted a Hootenanny with peach cobbler and ice cream. Roger's plans for retirement include participating in folk music and master naturalist related activities. Roger's raconteuring skills will be missed at OTSC. Happy Trails, Roger.

> **TEXAS A&M** RILIFF RESEARCH

Megan Rooney Joins OTSC

Megan K. Rooney joined OTSC in late June as an Analytical Chemist. Megan, a Bryan native, received her B.S. in Food Science from Texas A&M and then traveled to Minnesota to obtain her M.S. in Food Chemistry from University of Minnesota. She continued some post graduate work in Cereal Chemistry at Kansas State University before heading back to Texas A&M. Megan has worked in a number of capacities: at Pillsbury as a researcher and product development scientist; at a private school as a chemistry and physics teacher; at home as a scrapbook and photography consultant (and full time mom, of course); and in the community as a club manager for 4-H and a volunteer for FFA, Tiger Swimming, and Aggie Swim Club. She has received awards from Brazos County 4-H and was awarded 4-H Adult Volunteer of the year by Texas 4-H. She now begins a new chapter as an analytical chemist for the OTSC.

Megan is married to Dr. Bill Rooney and mother of three boys - Will, David, and Travis.



